



SOUTH CAROLINA

DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION

PO BOX 191

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March 12, 1990

MEMORANDUM TO DESIGN GROUP LEADERS & CONSULTANTS

Subject: Structural Steel Details

- 1) Shear Studs
- 2) Diaphragms

- 1) The standard size for shear studs to be used on the flanges of beams and girders shall be $7/8" \phi \times 5"$. Studs should be detailed 2 per row unless design considerations dictate otherwise. The minimum distance from the edge of flange to the center of the stud shall be 4 inches and the minimum distance center to center of stud shall be 3 inches. Studs placed on relatively thin elements such as beam and girder webs should be detailed as $3/4"$ diameter.
- 2) Interior diaphragms for rolled beam spans shall be detailed with 3 inches minimum clearance between the top of the diaphragm and the bottom of the top beam flange. For bridges having a normal roadway crown, the diaphragms shall be level. For bridges having a superelevated roadway, the diaphragms shall be placed parallel to the slab.

These requirements shall apply to all projects not already detailed.

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